

ABSTRACT

A niobium powder can be used to manufacture a niobium capacitor of excellent electrical properties. The niobium powder when formed into a sintered body of 3.15 to 3.9 g/cm³ density exhibits a capacitance (CV value at a formation voltage of 20V) ranging from 80 to 240 kCV/g and a CV retention of 57% or higher. With respect to the production of the niobium powder, the employed potassium niobate fluoride has a water content of 1000 ppm or less as determined from the amount of water generated upon heating at 600°C according to the Karl Fischer method.